Pollution Incident Response Management Plan

HW17 Newell Highway Upgrade – Mungle Back Creek to Boggabilla

CONTRACT No.: RMS. 17.0000303659.0319

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Content ID: 7812-CEMP_B11 PIRMP
Revision: 03
Revised: 10/03/2020

Document Control

This Plan interfaces with the other associated plans, which together describe the proposed overall project management system for the Project.

The latest revision of this plan is available on the Fulton Hogan server. If any unsigned hard copies of this document are printed, they are valid only on the day of printing.

The revision number is included at the bottom of each page. When revisions occur, the entire document will be issued with the revision number updated accordingly for each owner of a controlled copy.

Attachments/Appendices to this plan are revised independently of this plan.

Revision History

Rev	Revised By	Reviewed & Approved By	Date	Description/Summary of Changes
00	B.Cole	C.Ginn	16/10/2018	Initial draft for review
01	M.Staska	C.Ginn	20/11/2018	RMS comments
02	E Wright	C Ginn	25/03/2019	Rainfall event 17/03/2019 and PIRMP trial 19/03/2019
	E Wright	B Emmett	10/08/2019	Internal Review
	E Wright	B Emmett	11/11/2019	Internal Review as per EPA Alert request
03	E Wright	B Emmett	10/03/2020	Internal review, updated contact details and inclusion of Emergency Spill Response Sub Plan and Procedure

Note: PIRMP review and run through with team following EPA Alert ‘Emergency Preparedness’ issued 11/11/2019 was undertaken on 11/11/2019. No changes were made to PIRMP.

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1. Introduction

1.1. Purpose

Holders of an Environment Protection Licence (EPL) are required to prepare, keep, test and implement a Pollution Incident Response Management Plan (PIRMP) in accordance with the *Protection of the Environment Operations Act 1997* (the Act). This PIRMP has been prepared in accordance with Environmental guidelines: Preparation of pollution incident response management plans (EPA, 2012) for the Project EPL 21038.

The objectives of the PIRMP are to:

- Ensure comprehensive and timely communication about an incident to staff, the Environment Protection Authority (EPA) and other relevant authorities (such as local councils, NSW Ministry of Health, SafeWork NSW, Fire and Rescue NSW and the community) who may potentially be affected by the impacts of a pollution incident.
- Minimise and control the risk of a pollution incident at the Project by requiring identification of risks and the development of planned actions to minimise and manage those risks.
- Coordinate the implementation of controls to efficiently manage the incident.
- Provide training for staff, in relation to the PIRMP and its implementation, and to ensure the plan is regularly reviewed for accuracy, currency and suitability.

The PIRMP is required to be implemented **immediately** in the event of an activity resulting in or threatening material environmental harm at the premises. Material environmental harm is defined under the Act as:

> *147 Meaning of material harm to the environment*
>
> *(1) For the purposes of this Part:*
>
> *(a) harm to the environment is material if:*
>
> *(i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or*
>
> *(ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (or such other amount as is prescribed by the regulations), and*
>
> *(b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.*
>
> *(2) For the purposes of this Part, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.*

'Immediately' has its ordinary dictionary meaning of promptly and without delay.

1.2. Scope of this PIRMP

This PIRMP applies to the Newell Highway Upgrade which is being constructed by Fulton Hogan. The PIRMP covers the activities that occur on the Project that are under the direct control of Fulton Hogan and its subcontractors.

The PIRMP does not include any activities that occur off the EPL premises, for example, transportation of bulk fuel or hazardous waste by a contractor licensed by the EPA, unless the

transportation activity is being undertaken on the EPL premises under the control of Fulton Hogan. The only exception is the requirement for the Project Environment Manager to report fish kills to the DPI regardless of whether the fish kill is project related or not.

The PIRMP is divided into several key components including:

1. Pollutant inventory: A list of the potential pollutants stored or contained on the Project. This includes fuels, chemicals and other materials both natural and artificial. For example, sediment from bulk earthworks and stockpiles is considered a pollutant and is covered in the PIRMP.
2. Risk assessment: The risk assessment provides a tool for the assessment of potential hazards on the Project and the potential risks to the environment if an incident were to occur. It also provides a process for the identification of any areas where the management controls are not enough to address the identified risk. The risk assessment takes into account:
   - the location of the hazard and its proximity to sensitive receivers;
   - the volume of the hazard (if applicable) at that location;
   - the type of hazard; and
   - its potential consequence on the receiving environment.
3. Implementation: How the PIRMP is activated and implemented for the Project.
4. Mapping of pollutant risks: Maps of significant risks identifying significant risks and environmental constraints have been developed for the Project. These significant risks are identified through the risk assessment process and the mapping provided in the PRIMP provides an easy reference to the location and the potentially impacted receivers if an incident were to occur. Refer to Appendix 1 for attached maps.
5. Notification process: The notification process for incident response if an incident were to occur for:
   - the community and sensitive receivers; and
   - appropriate regulatory authorities and emergency services.
6. The principles of staff training: What the objectives of the training program are and who the PIRMP applies to at the Project.
7. Review process: The testing and review process for the implementation of the PIRMP includes the process for the review of the plan for incident response and the processes under the plan and its effectiveness and useability in the event of an incident.

1.3. PIRMP Framework

The framework for the PIRMP has been developed based on a risk assessment approach consistent with Australian Standard AS4360. To facilitate the risk assessment, a review of the controls already identified in the following project management plans was undertaken:

- Construction Environmental Management Plan;
- Environment and Pollution Incident Response and Notification Management Procedure; and
- Safety and Health Management Plan.

The processes and procedures in these plans provide a baseline on which to assess pollution hazards for the Project.

The framework of the PIRMP is consistent with Environmental guidelines: Preparation of pollution incident response management plans (EPA, 2012). The process for the development and implementation of the PIRMP is provided in Figure 1.

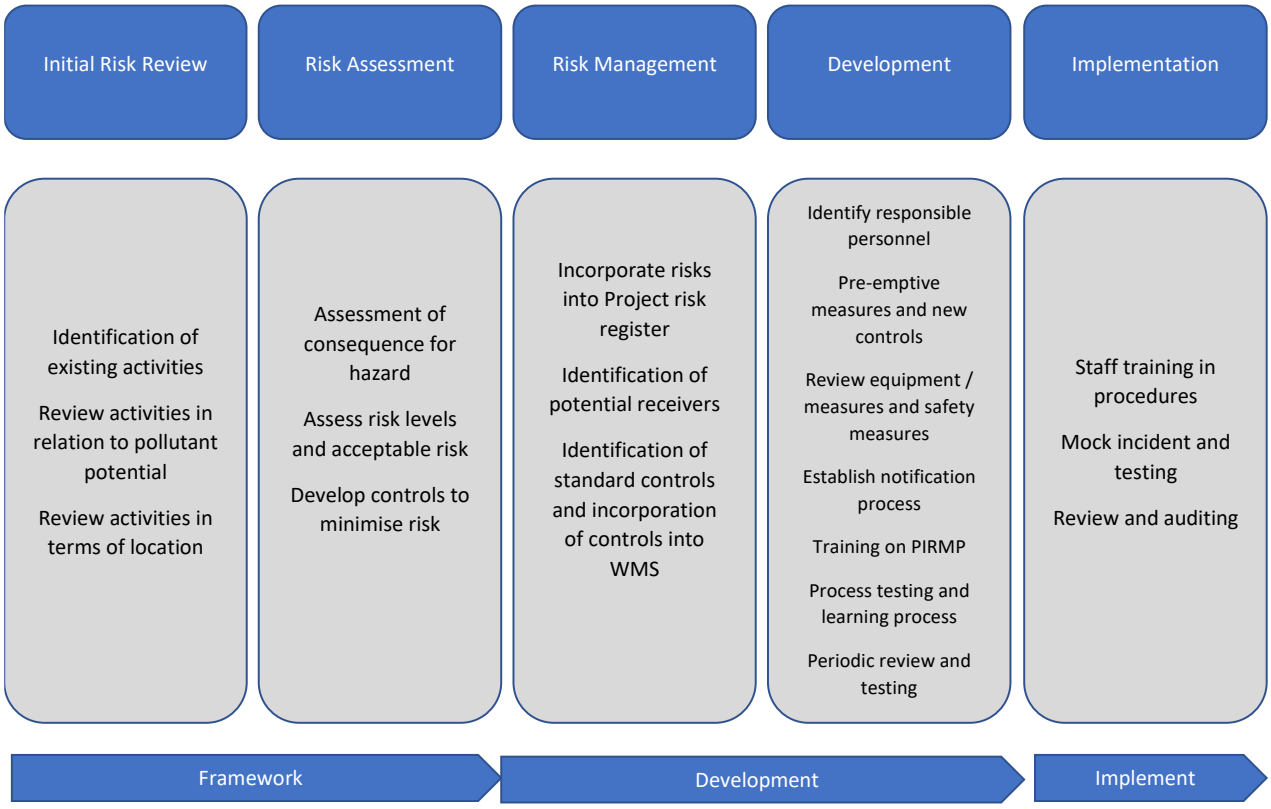

Figure 1 PIRMP development process

1.4. Relationship to other Emergency Plans

This PIRMP is not intended to duplicate existing site plans or procedures. Where an existing procedure or plan is in place which addresses a requirement of the PIRMP, the reference to that plan has been included within this PIRMP.

Plans relevant to the PIRMP include:

- Construction Environmental Management Plan (CEMP);
- Associated CEMP Sub plans;
  - Construction Noise and Vibration Management Plan;
  - Construction Soil and Water Management Plan;
  - Construction Flora and Fauna Management Plan;
  - Construction Heritage Management Plan;
  - Construction Air Quality Management Plan;
  - Construction Waste and Resource Use Management Plan;
  - Construction Traffic Management Plan.
- Environment and Pollution Incident Response and Notification Management Procedure;
- Project Safety Management Plan;
- Project Community Liaison Plan;
- Project Emergency and Crisis Management Plan; and
- Project Quality Plan.

2. Roles and Responsibilities

All personnel in the Project team are responsible for protecting the environment and preventing incidents. The management team on the Project are responsible for ensuring that environmental protection measures are planned for, resourced, communicated, installed, maintained and reviewed.

In responding to an incident there are key personnel who are responsible for the immediate implementation of this plan and the provision of appropriate resources to adequately address the risks identified within this PIRMP. The roles and responsibilities in relation to this PIRMP are described in Table 1.

Table 1 Roles and Responsibilities

Role	Key Responsibilities	Accountability
Project Manager	▪ ensure the approval conditions, EPL and other licences, permits, approval and consents are implemented; ▪ ensure the CEMP and Sub Plans are developed and approved; ▪ ensure appropriate consultation with government agencies is undertaken; and ▪ be aware and informed of pollution incident procedures and have organised means of notifying appropriate emergency groups. ▪ 24 hour EPA contact person;	Fulton Hogan RMS
General Superintendent and Superintendent	▪ plan and direct construction work in a manner that minimises environmental impact; ▪ ensure construction personnel manage construction works in accordance with the PIRMP; ▪ ensure environmental management procedures are implemented; and ▪ ensure environmental incidents are reported in accordance with plans and procedures, inc notification to Environment personnel; ▪ implement the PIRMP, CEMP and Sub Plans on-site; ▪ ensure sub-contractors comply with all plans and procedures; ▪ ensure that non-conformance processes are implemented; ▪ ensure a program of inspections and auditing is implemented; ▪ participate in the PIRMP audit and ensure findings are addressed; and ▪ approve environmental documentation where required;	Project Manager
Project Safety Manager	▪ notify Environmental personnel in the event of an environmental incident; ▪ ensure construction personnel manage construction works in accordance with the PIRMP;	Project Manager
Project Environment Manager	▪ develop environmental management plans including the CEMP and be active in PIRMP, CEMP and Sub Plan reviews; ▪ undertake consultation as required for environmental approvals; ▪ obtain and manage all relevant environmental licenses, approvals and permits; ▪ ensure corrective actions are developed and implemented following each audit; ▪ 24 hour EPA contact person; ▪ liaise with environmental agencies, RMS and the client regarding environmental management; ▪ where required, notify external authorities in the event of an environmental incident, including fish kills to the Fishers Watch Phoneline on 1800 043 536. ▪ provide advice to construction personnel regarding implementation and awareness of the PIRMP, CEMP and Sub Plans;	Project Environment Manager

Role	Key Responsibilities	Accountability
	▪ ensure environmental incidents are reported in accordance with plans and procedures; ▪ ensure environmental controls and mitigation measures are implemented and maintained; and	
Foreman	▪ ensure work activities comply with environmental controls and ensure pollution incident procedures are understood and able to be implemented; ▪ ensure environmental toolbox talks are delivered prior to works that are environmentally sensitive; ▪ notify Environmental personnel in the event of an environmental incident; and ▪ implement remedial actions and any other requirements after environmental incidents.	Superintendent
Project Engineer	▪ provide specific direction to construction personnel on PIRMP, CEMP and Sub Plan requirements; ▪ understand the PIRMP and ensure appropriate measures are in place on site to manage pollution incidents; ▪ ensure audit outcomes and incident investigations are communicated to construction personnel; and ▪ ensure environmental incidents are reported in accordance with plans and procedures.	Construction Manager
Construction Personnel	▪ understand environmental management requirements and implement pollution controls when necessary / as directed by supervisor or environmental staff; and ▪ notify supervisor of environment incidents in accordance with plans and procedures.	Foreman
Northern Region Construction Environment and Quality Manager	▪ develop environmental management plans including the CEMP ▪ be active in PIRMP, CEMP and Sub Plan reviews; (if required) ▪ liaise with the Project Environment Manager with respect to environmental compliance issues; ▪ investigate serious environmental incidents (if required) and assist in developing corrective actions.	Project Manager

Contact details for the personnel involved in the implementation of the PIRMP are provided in Table 2.

Table 2 Contact details

Role	PIRMP Responsibility	Name	Telephone
Project Manager	Responsible for Project Wide management post incident.	Brooke Emmett	0421 354 777
General Superintendent	First Contact – Responsible for coordinating on-site management and liaise with Environmental Manager.	Neil Ferguson	0438 147 978
Project Environment Manager	First Contact – Responsible for liaising with personnel at pollution site and providing guidance to the Construction Team to minimise environmental impact. Inform appropriate agencies and service providers in the event of a notifiable incident. Responsible for contacting Community Team to inform local Community Services / Parties as required.	Emma Wright	0438 338 607
Project Safety Manager	Responsible for managing the safety requirements for pollution incidents	Sharon Saunders	0417 951 951

3. Hazard and Risk Identification

3.1. Risk Assessment Methodology

The methodology applied to the risk assessment was consistent with the framework, as outlined in the AS 4360 Risk Management (refer to Figure 2). The information generated for each risk and the overall risk profile from the assessment is captured in a 'Risk Register', which has been included as Appendix 2 of this report.

The risk register was pre-populated with the activities and hazards for the Project at each location. This approach was utilised to effectively identify risks at specific locations on the Project.

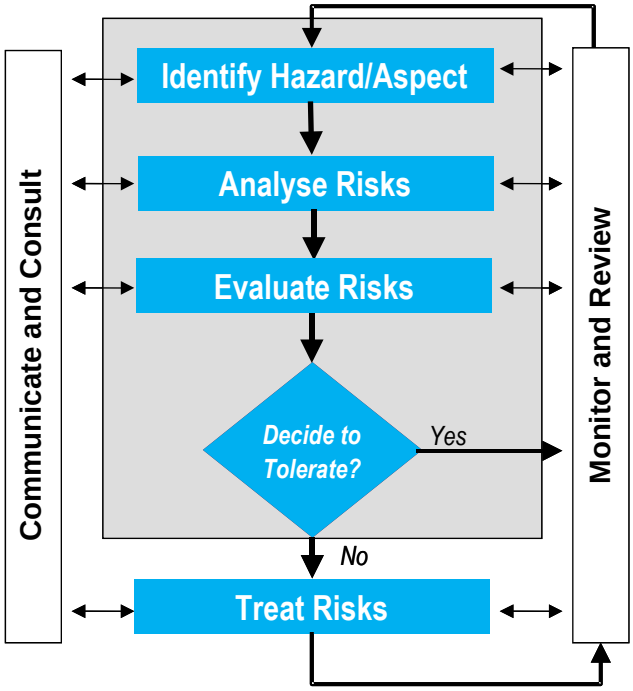

Figure 2 - Risk Management Framework (as per AS/NZ 4360 – Risk Management)

Using the likelihood and consequence criteria (Appendix 2) each risk has been rated with consideration of the existing management controls. Where these controls were identified as not acceptable (or no appropriate treatment strategies existed) these risks were identified as requiring further assessment.

These significant or unacceptable risks have been reviewed with regards to additional mitigation methodologies and then reassessed with regards to the risk to determine if these risks meet the acceptable criteria.

3.2. Risk Assessment Criteria

Risks to the Project were assessed in accordance with the below risk matrix to determine whether that risk is acceptable and tolerable if mitigation is implemented, or is intolerable, being that the risk cannot be supported except in exceptional circumstances. This approach has been utilised to review the risks identified in the risk register populated for the Project.

The principles of the risk assessment are:

- all reasonable efforts should be made to reduce risks to the lowest level possible, until the point is reached where the feasibility of introducing further mitigation measures is disproportionate to the environmental benefit that would be achieved.
- a risk should be tolerated only if it can be demonstrated that there is a clear benefit in doing so.

Existing controls are considered as a baseline for the risk assessment. A residual risk assessment was undertaken where the initial result was intolerable, with further mitigation included to minimise the risk.

If the risk was assessed as tolerable following the residual risk assessment the mitigation process was incorporated into the PIRMP. For those where the risk was still intolerable the process was repeated with alternative mitigation to address the risk (and so on).

The bands under the risk matrix can broadly be defined as:

- Intolerable: Risks are considered unacceptable regardless of the benefits associated with the activity. A risk that falls into this category must be eliminated or reduced to a level so that it falls into one of the two other categories; or there are exceptional reasons that require the activity or practice (e.g. emergency response to a train collision).
- Tolerable: Risks that are generally tolerable which provide benefits to the Project (i.e. use of mobile plant for construction and the associated risk of a fuel spill). Tolerable risks must be properly assessed and controlled to ensure the residual risk is effectively managed and reduced. These risks must be reviewed periodically to ensure they remain as low as possible.
- Broadly Acceptable: Risks are considered sufficiently low and well-controlled. Further risk reduction is required only if reasonably and practicable measures are available. Broadly acceptable risks are those that are regarded as insignificant or trivial.

In regard to the PIRMP the actions and activities under the Project may include those in the intolerable range. These actions relate to emergency response and under these risks there may be external parties involved including emergency services.

4. Results of the Risk Assessment

The risk assessment identified the hazards on the Project, their consequence and likelihood of occurring. Risks could be divided into several categories relating to safety or environment. The consequence categories for the risks in relation to environment are:

- Negligible and minor: very short-term impact, no clean up required, no residual effects.
- Moderate: Potential for short term environmental impact (some clean up required).
- Major: Localised harm, residual effects, clean up required, can be addressed by site resources.
- Substantial: Significant impact unable to be addressed by site resources. Significant clean up required. Involvement of emergency services required.

Main hazards on the Project identified during the risk assessment are captured in Table 3.

Table 3 Main hazards on the Project

Hazards	Potential Pollutant
Earthworks (general)	Sediment and dust
Concrete works and Concrete Washout	High pH runoff
Breaking/ Rock sawing	Dust

Storage of hazardous materials	Fuel/Chemicals
Refuelling of mobile plant	Fuel
Refuelling of generators	Fuel
Maintenance of plant	Fuel, Oils and Chemicals
Stockpiling of Materials	Sediment/Dust

These main hazards, including other hazards for the Project, were assessed through the risk assessment. Activities identified as having a 'high' or 'substantial' level of risk included:

- storage and transfer of fuels and chemicals at various sites;
- earthworks;
- refuelling of mobile plant and generators;
- culvert extensions;
- chemical storage;
- use of hydraulically powered plant near creek lines; and
- storage and transfer of fuels and chemicals at various sites.

Complete results of the risk assessment are provided in Appendix 2.

4.1. Inventory of Pollutants

Pollutants for the Project were identified and incorporated into the risk assessment. The pollutant inventory developed for the Project includes details of chemicals and fuels likely to be stored and used during construction, including the approximate volume and the location of storage. The Pollutant Inventory is included in Appendix 3.

5. Implementation

5.1. PIRMP Activation

The PIRMP will be activated immediately if an incident causes or threatens material environmental harm as defined in Section 1.1. This activation process will include the involvement of the Project Environment Manager and the Project Manager and will involve undertaking measures to mitigate the risk and ensure that the area is safe.

5.2. Pre-emptive Measures

Pre-emptive measures focus on the carrying out of construction activities in a controlled manner, taking into account environmental risks, to prevent pollution incidents from occurring on the Project. This includes measures such as construction planning, implementation and compliance with the Project CEMP and an inspection and maintenance regime. Additional pre-emptive measures for high risk activities include proper and adequate storage of materials and hazardous substances; including adequate bunding, refuelling to be undertaken at least 50 meters from a water course, creek, or river and best practice erosion and sediment controls measures. Detailed work method statements are prepared to identify specific risks, including environmental risks, and develop activity specific actions and controls to prevent incidents and ensure compliance. Measures and controls are detailed in the risk assessment (Appendix 2). The pollution incident flowchart included in Appendix 5 should be made available on-site so all staff are aware of basic reporting parameters.

In the event of an environmental incident, the *Environment and Pollution Incident Response and Notification Management Procedure* is followed, involving consultation and communication,

identification and assessment, implementation of controls and revision and management of the incident. This process is detailed in Section 7 of the CEMP.

5.3. Safety Equipment

Personal protective equipment (PPE) suitable for handling and using chemicals on the Project are stored at the site compounds along with the relevant Safety Data Sheets (SDS) information for each chemical to be stored on the Project site.

Equipment stored and available for use in the handling of chemicals may include:

- rubber gloves;
- rubber boots;
- eye goggles;
- tyvek suits;
- fire extinguishers; and
- fire hoses.

The PPE and equipment required for handling each individual chemical can be found on the specific SDS for that chemical.

Spill kits are in compound areas, site vehicles and on the Project near high-risk activities. Construction works near creek lines will have special equipment for dealing with spill containment in water, including floating booms, and will be identifiable due to their blue colouring, as opposed to the normal yellow spill kits. Spill kits will be checked as part of the weekly inspection and will be replenished as required. These kits are designed for immediate containment and management of pollution incidents and, as a minimum, are stocked with the following material;

- absorbent mats;
- absorbent floor sweep material;
- floating booms to control spills in water; and
- disposal bags.

5.4. Minimise Harm to Persons

Work Method Plans and toolbox talks relating to harm minimisation will be implemented for the Project to minimise harm to the workforce.

These tools detail how activities are to be undertaken and the processes around these activities. They include specifics about the handling and management of any hazardous substances associated with the activities undertaken. For significant incidents relating to hazardous materials management controls are referenced under the Project Safety Management Plan.

A summary of the process to minimise harm to personnel and the community are provided below. The Project Manager directs available site resources (labour, equipment, materials) to prevent and mitigate harm to persons on the premises.

This includes (but is not limited to):

- evacuation procedures; and
- clearly advertised muster points.

Plans include actions or arrangements that will be put in place to minimise the risk of harm to any persons who will be on the premises or who are likely to be on the premises should an incident occur. Access to a range of expert consultants is also available to provide expert medical, toxicology or environmental impact advice. Their contact telephone numbers are below (Table 4).

Table 4 Expert consultants contact details

Expert Area	Name	Telephone
Emergency	Emergency Services	000
Public Health	NSW Public Health Unit (Moree)	(02) 6757 0000
Medical	Moree Hospital	(02) 6757 0000
Toxicology	EAL Laboratory	(02) 6620 3678
Project Environment Manager	Emma Wright	0438 338 607

5.5. Actions to be Taken During or Immediately After a Pollution Incident

In the event of a pollution incident the Project Manager in consultation with the Project Environment Manager will take the lead on management of the pollution incident. The Project Manager will be supported by the General Superintendent who will make available the required resources to accomplish identified tasks. Resources may include labour, excavators or liquid waste vacuum trucks etc.

Immediately following the pollution incident, waste will be appropriately disposed of either using resources onsite or employing subcontractors where necessary. During clean-up, documentation of quantities and a description of waste will be recorded.

The Site Environmental Manager will conduct an investigation into the incident to identify the root causes and preventative actions that can be implemented to ensure that the incident does not re-occur. The pollution incident will be classified as per the RMS Classification Procedure in Appendix 4.

5.6. Notification to Authorities

A pollution incident is required to be immediately notified to relevant agencies and authorities if there is risk of “material harm” to the environment’, which is defined in Section 147 of the POEO Act as:

a) Harm to the environment is material if:
   (i) It involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
   (ii) It results in actual or potential loss or property damage of an amount or amounts in aggregate, exceeding $10,000 or such another amount as is prescribed by the regulations), and
b) Loss includes the reasonable costs and expenses that would be incurred in taking all the reasonable and practical measures to prevent, mitigate or make good harm to the environment

The process for notifying authorities is described in Appendix 5 of this document. The contact numbers for the appropriate organisations are provided below in Table 5. Contact details of appropriate regulatory

Table 5 Contact details of appropriate regulatory

Organisation	Telephone Number	Email
Fire and Rescue NSW	1300 729 579 000	info@fire.nsw.gov.au

Boggabilla Police	(07) 4671 9299	NA
Ambulance service of NSW	000	generalenquiry@ambulance.nsw.gov.au
NSW Ministry of Health	1300 066 055	NA
EPA Pollution Line	131 555	info@epa.nsw.gov.au
Fishers Watch Phoneline	1800 043 536	n/a
Moree Plains Shire Council	Moree (9am – 5pm) – 6757 3222 Boggabilla (9am—2pm) – 4676 2915	NA
SafeWork NSW	131 050	contact@workcover.nsw.gov.au

5.7. Community Stakeholder Notification

5.7.1. Definition of Community Stakeholders

Community stakeholders relate to residential, commercial and recreational areas surrounding the Project that may service or be affected by works. Community stakeholders for the Project are generally described as road users of the Newell Highway and adjacent residents and businesses.

Moree Plains Shire is located 640km northwest of Sydney and 473km southwest of Brisbane. The Mehi, Gwydir, Barwon and Macintyre Rivers flow through the Shire and the bore water of the Great Artesian Basin is a major tourist attraction and community asset. It is home to a dynamic and progressive community, boasting strong agricultural industries in cotton, grain, oilseeds and livestock.

5.7.2. Stakeholder Notification

The process in determining community notification requirements depends on the type, intensity and potential of impact to the community. Community stakeholder notification is required for incidents or events from the Project which:

- will result in an unacceptable impact to community stakeholders during the incident (where community stakeholders are present (e.g. residing in their houses or using adjacent recreational facilities at the time of the incident).
- will result in an unacceptable impact to a community area that is to be used by community members in the days and weeks following the incident. These community stakeholders may not be present during the incident but might be present in the following days.

An unacceptable impact is defined as one which has the potential adversely affect the health of a member of the community. This takes into consideration immediate health impacts (that occur during the incident) and health risks in the period following the incident.

The Community Relations Manager (and Project Environment Manager if required) in consultation with the Project Manager will make the above determination and trigger the stakeholder notification process.

It is likely that during the notification process, the incident will likely be under the control of emergency services personnel. In such an event the Community Relations Manager and Project Manager will provide all the necessary assistance to the incident controller including to the provision of access to the Project's community notification tools.

5.7.3. Community Stakeholder Notification Process

The process for notification of stakeholders relates directly to the nature of the hazard. If there is an unacceptable risk to the community from the pollution incident, the identified community will be notified. In this event, community stakeholders will be contacted either face to face or by telephone

to advise the stakeholder of the incident with recommended actions (that the community stakeholder can take to prevent or minimise harm) (for example close windows, evacuate buildings, not to drink or swim in watercourses etc). Further follow up communications will be undertaken as directed by the Community Relations Manager. This may include but not be limited to:

- further face to face/telephone contact;
- letterbox drops;
- email;
- update to Project website;
- providing protective fencing and barricading to prevent community stakeholders from entering a polluted area; and
- use of technology such as Variable Message/Motorway signage and radio communications.

The Project team will use a combination of the above mechanisms to ensure that relevant community messages are quickly and effectively distributed amongst the affected community.

5.8. Intervention by an Emergency Service

If the incident is unable to be contained or managed in a safe manner using the available resources on site and intervention by an Emergency Service is required (e.g. Fire and Rescue Services), the relevant emergency service will direct and control the response to the incident, including any planned evacuation or rescue of any community stakeholders.

The Project community database will maintain the contact details of receivers and will show the location of the premises, the environmentally sensitive areas and the types of environmental controls that are in place. These maps will be updated periodically, with the Project progression.

6. Documentation

6.1. Mapping

Mapping of sensitive areas has been undertaken for the Project relating to the storage locations for hazardous materials and pollution hazards. These are referred to as Sensitive Area Plans.

The maps provide the following information to site personnel:

- environmentally sensitive areas such as Endangered Ecological Communities threatened flora and fauna, nearest receivers, heritage areas and watercourses;
- key site controls and emergency equipment including:
  - spill kit locations;
  - hazardous substances storage (specific chemicals stored on the Project are identified in Appendix 3); and
  - location of fire-fighting equipment (note that every Fulton Hogan vehicle has a fire extinguisher as does all plant). There will be fire extinguishers located at the of the shipping containers that are used for storage and at the site office.

These maps are specific to the sensitive areas around the Project and include locations where hazards are encountered and present a significant risk to the environment. The maps for the Project are included in the CEMP as Appendix A5 and as Appendix 1 of this PIRMP. The maps will be updated periodically to reflect operations and staging of the Project.

6.2. Public Display of Information

This PIRMP is kept on file on site and is available for all site persons involved in the implementation and management of incidents on the Project. The plan is readily available to an EPA officer on request.

Relevant sections of this PIRMP will be placed on the Project website. This would include the following information:

- procedures for contacting the relevant authorities including the EPA, Local Council, NSW Ministry of Health, SafeWork NSW and Fire and Rescue NSW;
- procedures for contacting the community; and
- the information may be exclusive of any personal information within the meaning of the *Privacy and Personal Information Protection Act 1998.*

7. Continual Improvement

7.1. Review and Testing of the PIRMP

The PIRMP shall be reviewed and tested at least once every 12 months or within one (1) month following an incident that results in activation of the PIRMP. This process will confirm that the information included in the PIRMP is accurate and up to date and that the PIRMP is capable of being implemented in a workable and effective manner. The testing of the PIRMP may include a mock exercise to ensure workability or a desktop simulation which will cover all components of the plan. The review and testing of the PIRMP may be undertaken as a joint exercise as part of the Project Management Plan.

7.2. Training and Awareness

To ensure that the PIRMP is implemented effectively in the event of an incident, training will be provided to personnel involved in the implementation of the PIRMP.

The training will include:

- toolboxing relevant personnel on the Emergency Spill Response Sub-Plan and Procedure (Appendix 6);
- identification of the notification protocol;
- identification of the incident response equipment and its location; and
- training in the procedures for emergency response.

The principles around the training for the PIRMP are:

- prevention/mitigation activities: Provide training to assist in eliminating or reducing the impact of hazards;
- preparedness activities, which establish arrangements and plans to deal effectively with incidents on the Project; and
- response activities, which activate arrangements and plans to deal with incidents and emergencies if they occur.

A register of personnel trained under the PIRMP will be maintained as part of the training register and updated regularly (at least annually) following the review of the PIRMP. Staff responsible under the PIRMP will be trained on an annual basis (as a minimum).

Appendix 5 attached is a condensed site ready flowchart detailing the required response from a pollution incident. This flowchart should be made available around the project site, but should always be presented in connection with this PIRMP.

Appendix 1 Sensitive Area Plans

Appendix 2 Risk Matrix and Risk Register

Likelihood Criteria

Probability Table	
Probability band	**Description**
Almost Certain (5)	The threat can be expected to occur 75% - 99%
Likely (4)	The threat will quite commonly occur 50% - 75%
Possible (3)	The threat may occur occasionally 25% - 50%
Unlikely (2)	The threat could infrequently occur 10% - 25%
Rare (1)	The threat may occur in exceptional circumstances 0% - 10%

Consequence Criteria

Impact Table		
Impact band	**Health & Safety**	**Environment**
Substantial (5)	Class 1 (Fatal Incident)	Significant impact unable to be addressed by site resources. Significant cleanup required. Involvement of emergency services required.
Major (4)	Class 1 (Permanent Injury)	Localised harm, residual effects cleanup required, (can be addressed by site resources).
Moderate (3)	Class 2 (Lost Injury Time)	Moderate impact. Potential for short term environmental impact (some clean up required)
Minor (2)	Class 3 (Minor injury, medical treatment required)	Minor impact short term (<1 day) (no residual effects)
Negligible (1)	Class 3 (Slight injury, First Aid)	Very minor localised short term (<1hr) impact (no residual effects)

Risk Matrix

Risk Assessment Matrix		**Consequence**				
		Negligible	**Minor**	**Moderate**	**Major**	**Substantial**
Likelihood	**Almost Certain**	**Low (5)**	**Moderate (10)**	**Very High (18)**	**Extreme (23)**	**Extreme (25)**
	Likely	**Low (4)**	**Moderate (9)**	**Very High (17)**	**Very High (20)**	**Extreme (24)**
	Possible	**Low (3)**	**Moderate (8)**	**High (13)**	**Very High (19)**	**Very High (22)**
	Unlikely	**Low (2)**	**Low (7)**	**High (12)**	**High (15)**	**Very High (21)**
	Rare	**Low (1)**	**Low (6)**	**Moderate (11)**	**High (14)**	**High (16)**

Newell Highway

PIRMP (Risk Register)

Activity	Quantity (if applicable)	Pollutant Description	Existing Control (Business as usual)	Consequence	Initial Values			Risk Specific Controls and Implementation	Residual Risk		
					Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
General Activities											
Earthworks (General)		Sediment	ERSED Practices and Infrastructure, Shut down Procedure and SMS Alerts	Sedimentation of creek	Moderate	Possible	**High**	1. Implement ESCs as determined by Soil Conservationalist on the site ESCPs			
Foam Bitumen Plant operation		High pH water	Designated storage (bunding)	Surface water contamination	Minor	Rare	**Low**	1. Conduct plant operations, inspections and maintenance per plant ops plan. 2. Any unplanned discharges from the plant should be reported through incident management protocol.	Minor	Unlikely	**Low**
Foam Bitumen Plant chemical handling and storage		Chemicals (Land)	Designated storage (bunding)	Surface water contamination	Minor	Possible	**Moderate**	1. Store plant chemicals per AS1940 requirements or safe plant operation requirements. 2. Any primary bulk storage of fuels are to be double bunded, with the bund volume allowing sufficient capacity to store spills. Refuelling points are to include perscribed back flow valves (if applicable), emergency cut off switches and should always be supervised during refilling. 3. Discharges of hydrated lime are to be treated as any other chemical discharge requiring rectification and incident reporting.	Minor	Rare	**Low**
Concrete Curing		Chemicals (water)	Protection of Pits, Weather Forecast Monitoring	Surface water contamination	Moderate	Unlikely	**High**	1. Do not pour in the event of high-risk storm activity. 2. Ensure suitable stormwater retention controls are inplace. 3. Ensure desginated concrete washouts are available in the event of spoiled loads or agitator clean out	Minor	Rare	**Low**
Foam Bitumen Placement		Chemicals (Water & Land)	Spill Kits, Protection of Pits, Weather Forecast Monitoring	Surface water contamination	Minor	Rare	**Low**	1. Ensure work method statements account for chemicals and proccesses used for FB placement. 2. Ensure weather forecasts are undertaken so as not to lay during high rain likelihood.	Minor	Unlikely	**Low**
Pavement Demolition		Sediment	ERSED Practices and Infrastructure, Shut down Procedure and SMS Alerts	Sedimentation of creek	Moderate	Rare	**Moderate**	1. Ensure profilings (or waste as classified by NSW EPA waste classification guidelines) are handled, placed and tracked as per legislated guidelines	Minor	Rare	**Low**
Pavement Demolition		Dust	Water sprays	Respiratory distress	Minor	Likely	**Moderate**	1. Utilise water cart to wet site so that no nuisance dust impacts to travelling public or sensitive receivers. 2. ensure PPE for workers is inplace	Negligible	Rare	**Low**
Spray Sealing (Bitumen)		Chemicals (water)	Spill Kits, Protection of Pits, Weather Forecast Monitoring	Water contamination	Negligible	Rare	**Low**	1. Implement fulton hogan spray sealing risk assessment and weather anaylsis tool prior to commencing work	Minor	Unlikely	**Low**
Refuelling of mobile plant (onsite)		Fuel	Spill Kit. Refuelling procedure and training	Soil and Water Contamination	Moderate	Rare	**Moderate**	1. Refuel >50m from water courses 2. Spill kit with refuelling vehicle 3. Spill waste bags with refuelling vehicle	Minor	Unlikely	**Low**
Refuelling of Generators		Fuel	Spill Kit. Refuelling procedure and training	Oil spill	Moderate	Rare	**Moderate**	1. Refuel >50m from water courses 2. Spill kit with refuelling vehicle 3. Spill waste bags with refuelling vehicle 4. Place spill mat under refuelling point	Minor	Rare	**Low**
Structure Demolition		Dust	Water sprays	Respiratory distress	Minor	Possible	**Moderate**	1. Remove all wastes to appropriate waste disposal location	Minor	Unlikely	**Low**
Fuel Storage		Fuel	Spill Kits, Protection of Pits, MSDS, bunded containers	Soil and Water Contamination	Minor	Possible	**Moderate**	1. Store plant chemicals per AS1940 requirements and CEMP. 2. Any primary bulk storage of fuels (>10,000L) are to be double bunded, with the bund volume allowing sufficient capacity to store spills. Refuelling points are to include spill mitigations and emergency cut off buttons 3. Spill response equipment is available on-site for use in emergency response. 4. Site personnel aware of the risks of working around stormwater infrastructure 5. Refuelling undertaken in accordance with relevant SWMS and the following: - Undertaken at least 50 metres away from any watercourse or drainage line. - Refuelling will be supervised at all times. - Refuelling hoses fitted with isolation valves (stop valve at nozzle end).	Minor	Unlikely	**Low**
Chemical Storage		Chemicals (Water & Land)	Spill Kits, Protection of Pits, MSDS, bunded containers	Soil and Water Contamination	Moderate	Unlikely	**High**	1. General chemicals storage within bunded areas in designated bunded storage sheds (see AS1940) 2. day use containers do not need bunding during daytime operations, onl after hours, or if greater that 100L	Minor	Unlikely	**Low**
Use of hydraulically powered plant (hose rupture)		Oil	Well maintained plant and Spill Kits	Soil and Water Contamination	Moderate	Likely	**Very High**	1. Ensure spill response equipment is available on-site for use in emergency response (as per Incident and Emergency response plan). 2. Remediate any contamination resulting from spills and leaks that occur on-site 3. All plant, equipment and vehicles used on-site will be maintained to minimise the leakage of oil, fuel and hydraulic and other fluids. 4. During the servicing of machinery, Fulton Hogan or their subcontractor will use measures (e.g spill trays, mats or bunded areas) to capture and contain oils, fuels, hydraulic and other fluids to minimise contamination of local soils. No major servicing to be conducted on site.	Minor	Possible	**Low**
Saw cutting slurry		High pH water	Wet Vacs	Water contamination	Minor	Possible	**Moderate**	1. Utilise sucker truck to remove slurry if cutting near waterways 2. if cutting away from waterways utilise bunding, slurry retention ponds or sucker truck, as risk assessment of works dictates	Minor	Unlikely	**Low**
Creeks / Catchment Areas											
Earthworks (General)		Sediment	ERSED Practices and Infrastructure, Shut down Procedure and SMS Alerts	Sedimentation of creek	Moderate	Rare	**Moderate**	1. Implement ESCs as determined by Soil Conservationalist on the site ESCPs	Minor	Unlikely	**Low**
Concrete Curing		Chemicals (water)	Protection of Pits, Weather Forecast Monitoring	Surface water contamination	Major	Rare	**High**	1. Do not pour in the event of high-risk storm activity. 2. Ensure suitable stormwater retention controls are inplace. 3. Ensure desginated concrete washouts are available in the event of spoiled loads or agitator clean out	Moderate	Rare	**Low**
Foam Bitumen Placement		Chemicals (Water & Land)	Spill Kits, Protection of Pits, Weather Forecast Monitoring	Surface water contamination	Minor	Rare	**Low**	1. Ensure work method statements account for chemicals and proccesses used for FB placement. 2. Ensure weather forecasts are undertaken so as not to lay during high rain likelihood.	Minor	Unlikely	**Low**

PIRMP (Risk Register)

Activity	Quantity (if applicable)	Pollutant Description	Existing Control (Business as usual)	Consequence	Initial Values			Risk Specific Controls and Implementation	Residual Risk		
					Consequence	Likelihood	Risk Rating		Consequence	Likelihood	Risk Rating
Pavement Demolition		Dust	Water sprays	Respiratory distress	Negligible	Likely	**Low**	1. Ensure profilings (or waste as classified by NSW EPA waste classification guidelines) are handled, placed and tracked as per legislated guidelines	Minor	Rare	**Low**
Spray Sealing (Bitumen)		Chemicals (water)	Spill Kits, Protection of Pits, Weather Forecast Monitoring	Water contamination	Moderate	Possible	**High**	1. Implement fulton hogan spray sealing risk assessment and weather anaylsis tool prior to commencing work 2. Make sure wash-off points to creeks and rivers have temporary cut-offs in place to stop bulk loss of wash-offs.	Minor	Possible	**Low**
Culvert construction		High pH water	Concrete Washouts and Protection of Pits, Runoff Collection systems	Water contamination	Minor	Unlikely	**Low**	1. Ensure ESCs are inplace prior to starting work 2. Divert existing waterway around worksite 3. Comply with any specific permit conditions stipulated for working in the creek	Minor	Rare	**Low**
Culvert Extensions		Sediment	Coffer dam or creek diversions, Silt curtains.	Sedimentation of creek	Moderate	Possible	**High**	1. Ensure ESCs are inplace prior to starting work 2. Divert existing waterway around worksite 3. Comply with any specific permit conditions stipulated for working in the creek	Minor	Unlikely	**Low**
Refuelling of mobile plant (onsite)		Fuel	Spill Kit. Refuelling procedure and training	Soil and Water Contamination	Moderate	Rare	**Moderate**	1. NOT to be undertaken within 50m of a waterway.	Negligible	Rare	**Low**
Structure Demolition		Dust	water sprays	Respiratory distress	Minor	Unlikely	**Low**	1. Remove all wastes to appropriate waste disposal location	Minor	Unlikely	**Low**
Drainage Work (Pits and Pipes)		Sediment	Coffer dam or creek diversions, Silt curtains	Sedimentation of creek	Minor	Unlikely	**Low**	1. Ensure ESCs are inplace prior to starting work 2. Divert existing waterway around worksite 3. Comply with any specific permit conditions stipulated for working in the creek	Minor	Unlikely	**Low**
Chemical Storage		Chemicals (water)	Spill Kits, Protection of Pits, MSDS, bunded containers	Soil and Water Contamination	Moderate	Unlikely	**High**	1. NO chemical storage to be undertaken within 50m of a waterway.	Minor	Unlikely	**Low**
Use of hydraulically powered plant (hose rupture)		Oil	Well maintained plant and Spill Kits	Soil and Water Contamination	Moderate	Likely	**Very High**	1. Ensure spill response equipment is available on-site for use in emergency response (as per Incident and Emergency response plan). 2. Remediate any contamination resulting from spills and leaks that occur on-site 3. All plant, equipment and vehicles used on-site will be maintained to minimise the leakage of oil, fuel and hydraulic and other fluids. 4. During the servicing of machinery, Fulton Hogan or their subcontractor will use measures (e.g spill trays, mats or bunded areas) to capture and contain oils, fuels, hydraulic and other fluids to minimise contamination of local soils. No major servicing to be conducted on site	Negligible	Possible	**Low**

Appendix 3 Pollutant Inventory

There is a 6000 litre self bunded diesel storage tank at the site compound (with adjacent spill kit).

Pollutant	Capacity	Storage	Safety Data Sheet(s) kept on site?
Diesel	6000lt	Self bunded container	Yes
Unleaded Petrol	60lt (3xJerry cans)	Self bunded container	Yes
2-stroke petrol	10lt	Self bunded container	Yes
Spray paint aerosols	(6 x 350ml cans)	Shipping container	Yes
WD40	6 x 350g cans	Shipping container	Yes
Engine oil	20lt	Shipping container	Yes
Hydraulic oil	20lt	Shipping container	Yes

Appendix 4 Environment Incident Classification Reporting Procedure

Environmental Incident Classification and Reporting Procedure

Roads and Maritime Services | November 2018

Document No. | RMS 17.374 | Version 5.1

NSW GOVERNMENT

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About this release

Title	Environmental Incident Classification and Reporting Procedure

Approval		
Prepared by	Environment Manager Performance Improvement	Scott Machar
Reviewed by	Director Environment Operations	Sally Durham
Approved by	Director Environment	Michael Crowley

Document Control			
Version	5.1	**Release date**	November 2018
Publication Number	RMS 17.374	**ISBN**	978-1-925659-57-3

Contents

Acronyms and definitions	
Acronym	**Definition**
DE	(Roads and Maritime Services) Director Environment
DES	(Roads and Maritime Services) Director Environment Sydney
DPE	Department of Planning and Environment
Environmental harm	Any act that degrades or pollutes the environment
EPA	NSW Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1997*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPL	Environment Protection Licence
POEO Act	*Protection of the Environment Operations Act 1997*
REF	Review of Environmental Factors
Roads and Maritime	NSW Roads and Maritime Services
SEQC	(Roads and Maritime Services) Safety Environment and Quality Co-ordinator
SEQO	(Roads and Maritime Services) Safety Environment and Quality Officer
WHS	Work Health and Safety

1. Introduction

1.1 Aim

The Environmental Incident Classification and Reporting Procedure (the Procedure) aims to ensure Roads and Maritime Services workers and contractors understand how to classify, respond to and report environmental incidents that occur as a result of Roads and Maritime managed activities.

1.2 Objectives

The objectives of the Procedure are to:

- Ensure all relevant Roads and Maritime workers, managers and contractors are made aware of environmental incidents promptly and can respond accordingly
- Ensure site workers understand the immediate environmental incident reporting requirements
- Ensure all workers understand reporting timeframes, including statutory requirements
- Ensure incidents are reported to enable monitoring, sharing of lessons learnt and response to emerging environmental incident trends
- Comply with statutory obligations to report certain environmental incidents to regulators and other relevant government agencies (see section 5.1).

1.3 Scope and coverage

This Procedure is applicable to all Roads and Maritime activities where environmental incidents may occur. This includes (but is not limited to):

- Temporary activities, such as preliminary investigations (e.g. geotechnical and environmental surveys) and the construction and maintenance of Roads and Maritime assets
- Activities at Roads and Maritime properties and facilities
- Vessels operated by Maritime division
- Activities undertaken by contractors on behalf of Roads and Maritime.

The requirements of this Procedure must be communicated to all Roads and Maritime workers and contractors (e.g. during inductions) who are undertaking activities where incidents may occur.

The Procedure is for internal reporting processes, except where incidents are identified that need to be notified to regulators, and other relevant authorities (see section 5.1).

The procedure does NOT cover environmental incidents caused by:

- Operational road and traffic activities of the general public (e.g. vehicle accidents, fires caused by discarded cigarette butts)
- Boating accidents (except those involving Roads and Maritime vessels)
- Dumping of materials by members of the public on Roads and Maritime roadsides or land (except where hazardous materials are unexpectedly found during road construction or maintenance activities). Illegal dumping should be reported to the NSW Environment Protection Authority (EPA)
- Marine oil and chemical spills covered by the National Plan for Maritime Environmental Emergencies (Australian Maritime Safety Authority, 2014).

2. Environmental incident classification

There are three categories of environmental incidents, as detailed in Table 2.

Table 2: Environmental incident classification

Category	Description	Examples	
Category 1	Potential breaches of legislation or failures of process that result in actual off-site environmental harm, or residual on-site environmental harm or Works undertaken outside approved areas, without required approval or without environmental assessment or Any Material Harm pollution incident as defined by Part 5.7 of the *Protection of the Environment Operations Act 1997* (POEO Act).	Pollution Incidents	Discharge of waters from site not in accordance with any approval requirements (e.g. discharge criteria in an Review of Environmental Factors (REF) safeguard or Environment Protection Licence (EPL) condition)
			Pollution, or potential pollution, of waters
			Unmanaged vehicle tracking of materials or emissions of dust, offensive odours or noise beyond the site boundary that are not managed in accordance with approval requirements and/or might impact on nearby land users
			Pollution incidents that threaten harm to the health or safety of people (e.g. uncontrolled releases of hazardous substances)
			Unauthorised or illegal disposal or transport of waste
			A spill or other incident that causes pollution to land
		Conservation Breaches	Unauthorised harm or damage to native flora and fauna (terrestrial or aquatic/marine)
			Unauthorised dredging or reclamation works within a watercourse
			A fire caused by Roads and Maritime activities that travels beyond the boundary causing or potentially causing harm to the environment or community
		Heritage Breaches	Unauthorised harm to Aboriginal objects and Aboriginal places
			Unauthorised damage to any State or locally significant relic or Heritage item, or item listed on the Roads and Maritime Section 170 register

Table 2: Environmental incident classification			
Category	**Description**	**Examples**	
		Planning and compliance breaches	Failure to comply with the requirements of: • The *Environmental Planning and Assessment Act 1997* (EP&A Act), including exempt activities, Part 5 determinations and Part 5.1 approvals • An *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval • An EPL • A CEMP or environmental work method statement • A permit from a regulator (e.g. under the *Fisheries Management Act 1994*)
Category 2	Failures of process or events that do not result in off-site environmental harm, or residual on-site environmental harm. These incidents may result in temporary on-site environmental harm that can be rectified to pre-existing conditions.	A procedural, administrative or technical breach of environmental requirements, including: • Failure to prepare or submit required documents, reports or other correspondence • Failure to comply with the requirements of: o The *Environmental Planning and Assessment Act 1997* (EP&A Act), including exempt activities, Part 5 determinations and Part 5.1 approvals o An *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval o An EPL o A CEMP or environmental work method statement o A permit from a regulator (e.g. under the *Fisheries Management Act 1994*).	
		Spills and discharges that do not leave a site boundary and are cleaned up without residual on-site environmental harm, and the area of temporary impact can be restored to pre-existing conditions	
		A fire that is contained on site and does not cause or potentially cause adverse impact to the environment or community	
Reportable Event	An event or unexpected find that occurs outside the scope of reasonable environmental controls and mitigation measures	Sediment or site water travelling beyond a site boundary, and where it can be demonstrated that: • Erosion and sediment controls were installed and maintained in accordance with an erosion and sediment control plan, and • The cause of the incident was reasonably unforeseen or the weather (rain, wind etc) event exceeded the design capacity of controls.	

Table 2: Environmental incident classification		
Category	**Description**	**Examples**
		Note these events are considered to have occurred (and the response should commence in accordance with Section 3) when sediment or site water first travels beyond the site boundary (e.g. when an appropriately sized and maintained sediment basin commences overtopping)
		An unexpected archaeological find that is being managed in accordance with the "Roads and Maritime Standard Management Procedure - Unexpected Archaeological Finds"
		An unexpected threatened species find that is being managed in accordance with the "Roads and Maritime Biodiversity Guidelines – unexpected threatened species finds procedure"
		An unexpected find of contaminated soils, asbestos or other potentially hazardous substances during construction or maintenance works. Note that once a particular contaminant is identified or found for the first time (either during project planning or construction phases) it is then reasonably expected to be found, so additional finds need not be reported in this category.
Regulatory Action	Formal regulatory action from an environmental regulator (that has not already been reported in conjunction with another incident)	Formal regulatory action from an environmental regulator includes, but is not limited to: • Penalty infringement notices (PINs) • Clean up notices • Prevention notices • Official cautions / warnings • EPA show cause notifications.

Note: For any incident where there is associated formal regulatory action from an environmental regulator, copies of this correspondence must be forwarded to envops@rms.nsw.gov.au in addition to the Environmental Incident Report (see section 4).

3. Environmental incident response

3.1 Considerations and steps for environmental incident response

The step-by-step response for Category 1 incidents, Category 2 incidents and Reportable Events is detailed in Table 3.1a (activities undertaken by contractors) and Table 3.1b (activities undertaken by Roads and Maritime Regional Maintenance). However, some key points apply throughout all stages of the response to any environmental incident:

- If in doubt, treat all incidents as Category 1 to ensure reporting timeframes can be met
- Project teams should also undertake the following notifications as appropriate:
    - Roads and Maritime Corporate Communications for any incidents that have potential for community or media attention (see section 4.4)
    - Roads and Maritime Work Health and Safety (WHS) Branch for any incidents that involve actual or potential risks to worker health and safety (see section 4.4).
- The person responsible for operational management of the site/activity shall assume responsibility for the response to the incident and direct actions as necessary and in accordance with this Procedure
- The Director Environment Sydney (DES) may reclassify the category of an incident where appropriate, in consultation with the relevant Roads and Maritime Environment Manager.

Any Regulatory Action received (that has not already been reported in conjunction with another incident) should be immediately forwarded to the envops@rms.nsw.gov.au mailbox, and followed by an immediate phone call to the relevant Roads and Maritime Environment Manager, who will immediately advise the DES. Consideration should then be given as to whether an environmental incident has occurred (see section 2) that should be reported in accordance with this section.

Table 3.1a: Environmental incident response – activities undertaken by contractors				
Step	**Action**	**Responsibility for completing action**	**Timeframe**	
			Category 1 Incidents	Category 2 Incidents / Reportable Events
1	Stop work in relevant area (if necessary) and take actions to prevent adverse impact to human health or the environment. Note human health and safety is the primary concern, and no action should be taken if it is not safe to do so - in these instances emergency services should be contacted (phone triple zero).	Person who identifies incident	Immediate	Immediate
2	Advise the contractor site management team (and Roads and Maritime Corporate Communications and/or WHS Branch as appropriate)	Person who identifies incident	Immediate	Immediate
3	Advise the Roads and Maritime project management team and the relevant Roads and Maritime Environment Manager.	Contractor	Immediate	Day of the incident
4	Consider if the incident is a pollution incident that constitutes Material Harm in accordance with Part 5.7 of the POEO Act. For Material Harm pollution incidents, notify relevant agencies (see section 5.2). Sites with an EPL should implement their Pollution Incident Response Management Plan.	Contractor	Immediate	Immediate
5	Advise DES by phone. The DES may request photographs and a brief summary of known information via email. The following Roads and Maritime managers should also be notified by phone as relevant: • Director Environment (Regions) • Director Environment (Motorways).	Roads and Maritime Environment Manager	Immediately following advice of the incident	N/A
6	Where relevant, notify incident to appropriate regulatory agency (see section 5.1). Note this does not refer to the requirement to notify Material Harm pollutions incidents (see Step 4).	Contractor	As required by legislation	As required by legislation
7	Complete the incident report form (see section 4.2), including sign-off from Roads and Maritime Project Manager, and submit to Roads and Maritime Environment Manager* (see sections 4.3 and 4.4).	Contractor	Within 3 business days of the incident	Within 3 business days of the incident
8	Sign and submit incident report form to envops@rms.nsw.gov.au.	Roads and Maritime Environment Manager	On the day of receipt of the form	On the day of receipt of the form
9	For Material Harm pollution incidents, provide a written report to each relevant authority (see section 5.2).	Contractor	Within 7 days of the incident	N/A
10	Undertake incident investigation (level of investigation to be appropriate to the severity of the incident) to determine root cause and any necessary corrective actions. Summarise findings in 'Incident Lessons Learnt' template and submit to Environment Manager for review.	Contractor	Within 1 month of incident	N/A
11	Submit final Incident Lessons Learnt to envops@rms.nsw.gov.au.	Roads and Maritime Environment Manager	Within 1 week of receipt	N/A
12	Consider the need for any required corrective actions to be addressed through a management system (e.g. corrective action request), and any required updates to a risk register.	Roads and Maritime Environment Manager and project team	As appropriate	As appropriate

*Alternate workflow / signatory arrangements may be required for projects where a third party is involved (e.g. a delivery authority). These arrangements can be confirmed with the relevant Roads and Maritime Environment Manager.

Table 3.1b: Environmental incident response – activities undertaken by Regional Maintenance (including contractors or RMCC on behalf of Regional Maintenance)				
Step	**Action**	**Responsibility for completing action**	**Timeframe**	
			Category 1 Incidents	Category 2 Incidents / Reportable Events
1	Stop work in relevant area (if necessary) and take actions to prevent adverse impact to human health or the environment. Note human health and safety is the primary concern, and no action should be taken if it is not safe to do so - in these instances emergency services should be contacted (phone triple zero).	Person who identifies incident	Immediate	Immediate
2	Advise the Roads and Maritime site management team and the relevant Roads and Maritime Environment Manager and Safety Environment Quality Officer (SEQO) / Safety Environment Quality Co-ordinator (SEQC) (and Corporate Communications and/or WHS Branch as appropriate)	Person who identifies incident	Immediate	Immediate
3	Advise DES by phone. The DES may request photographs and a brief summary of known information via email. The relevant Regional Maintenance Manager must also be notified.	Environment Manager	Immediate	N/A
4	Consider if the incident is a pollution incident that constitutes Material Harm in accordance with Part 5.7 of the POEO Act. For Material Harm pollution incidents, notify relevant agencies (see section 5.2). Sites with an EPL should implement their Pollution Incident Response Management Plan.	DES	Immediately following advice of the incident	N/A
5	Where relevant, notify incident to appropriate regulatory agency (see section 5.1). Note this does not refer to the requirement to notify Material Harm pollutions incidents (see Step 4).	Environment Manager	As required by legislation	As required by legislation
6	Complete the incident report form (see section 4.2), including sign-off from Roads and Maritime Project Manager, and submit to SEQC (see section 4.3).	Relevant Roads and Maritime site representative	Within 3 business days of the incident	Within 3 business days of the incident
7	SEQC to sign and submit incident report form to relevant Environment Manager (see section 4.4).	SEQC	On the day of receipt of the form	On the day of receipt of the form
8	Sign and submit incident report form to envops@rms.nsw.gov.au.	Environment Manager	On the day of receipt of the form	On the day of receipt of the form
9	For Material Harm pollution incidents, provide a written report to each relevant authority (see section 5.2).	DES	Within 7 days of the incident	N/A
10	Undertake incident investigation (level of investigation to be appropriate to the severity of the incident) to determine root cause and any necessary corrective actions. Summarise findings in 'Incident Lessons Learnt' template and submit both to Environment Manager for review. Consider the need for any required corrective actions to be addressed through a management system (e.g. corrective action request), , and any required updates to a risk register.	SEQC	Within 1 month of incident	N/A
11	Submit final Incident Lessons Learnt to envops@rms.nsw.gov.au.	Roads and Maritime Environment Manager	Within 1 week of receipt	N/A

Copies of formal regulatory action from an environmental regulator (that has not already been reported in conjunction with another incident) must be forwarded to the relevant Roads and Maritime Environment Manager (and SEQC/SEQO for Regional Maintenance projects) and envops@rms.nsw.gov.au immediately upon receipt.

3.2 Critical incidents

Some Category 1 incidents require escalation so relevant members of the Roads and Maritime Executive are aware of the incident and ready to respond as necessary. Category 1 incidents will be deemed 'Critical Incidents' for escalation to the Executive when they have the potential for:

- Regulatory action (e.g. EPA Penalty Infringement Notice) and/or
- Reputational damage (e.g. media coverage) and/or
- Significant environmental harm.

Guiding factors that will be considered when determining whether there has been 'significant' environmental harm include:

- When there has been actual or potential harm to the health or safety of people or to the environment that is not trivial
- Actions required to prevent, mitigate or make good the actual or potential environmental harm are likely to exceed $10,000

When a potential 'Critical Incident' is reported, the DES will immediately brief the Director Environment (DE) who will make a determination on whether it will be considered a 'Critical Incident'. The DE will then brief the Roads and Maritime Chief Executive and relevant Executive Director, as well as any other members of the Executive as appropriate. When the DE cannot be contacted, the DES will make the determination and make the relevant Executive briefings.

4. Environmental incident reporting

4.1 Environmental incident report form

The Environmental Incident Report Form should be completed for Category 1 incidents, Category 2 incidents and Reportable Events, and is available on the Roads and Maritime website.

4.2 Completing the incident report form

All parts of the Incident Report Form must be completed in accordance with this procedure and following the instructions within the form. The Form (and any subsequent reports) must only include factual information. Speculation about the causes and outcomes of incidents are not to be included.

The Form must be signed by the following:

Signatory	Reason
The person making the report	The person witnessed the incident or has the most knowledge of the incident, and can provide sufficient factual information.
The Roads and Maritime Project Manager	To ensure all relevant Roads and Maritime parties can be made aware of the incident, and appropriate resources can be allocated and/or approved to respond to the incident. This also ensures the project management team are aware of any environmental performance trends if multiple incidents occur.
Safety Environment and Quality Co-ordinator (Roads and Maritime Regional Maintenance only)	To ensure Regional Maintenance management system staff are aware of the incident, and any necessary management system changes can be made once corrective actions and lessons learnt are finalised.
The relevant Roads and Maritime Environment Manager	Concurrence that the incident is adequately described, and the immediate actions and corrective actions are appropriate.

As noted in Table 3.1a, alternate signatory arrangements may be required for projects where a third party is involved (e.g. a delivery authority). These arrangements can be confirmed with the relevant Roads and Maritime Environment Manager.

4.3 Submitting the incident report form

All Incident Report Forms must be populated, signed and submitted electronically (never printed / signed / scanned etc.) to enable Roads and Maritime to electronically capture the information entered in the form.

Completed Incident Report Forms should be submitted by the Roads and Maritime Environment Manager to the Environment Operations mailbox:

- envops@rms.nsw.gov.au

It is essential that a clear and consistent subject line convention is used to allow tracking of correspondence about each incident. All emails about an incident between all parties should structure the subject line as follows:

- Category X - project name / incident location - date
- For example, Category 1 – Main Road Upgrade – dd/mm/yy.

Where information cannot be gathered within the timeframes set out in this Procedure, the incident form should be submitted to the mailbox as a ‘draft’, whether or not the information contained is fully completed.

- For example, Category 1 – Main Road Upgrade – dd/mm/yy (DRAFT).

The Environment Manager should then request further information from the person making the report, and the final report should be submitted within the next 24 hours.

4.4 Roads and Maritime contacts

The relevant Environment Manager for each region and Project Office is the first point of contact for enquiries relating to environmental incidents. Current contacts for all Roads and Maritime Environment Managers can be found on the Roads and Maritime website.

Environment Managers can also provide contact details for other relevant contacts during an incident, such as Communications or Work, Health and Safety. Hazards and occurrences that occur during Roads and Maritime activities should be reported through the Roads and Maritime WHS reporting line on 1300 131 469.

The DES oversees the application of this Procedure, and can be contacted in the absence of the relevant Environment Manager for Category 1 incidents:

- Phone - (02) 0428 608 758

5. Regulatory agency notification

5.1 Notification of Material Harm pollution incidents

5.1.1 Definition of Material Harm pollution incidents

Under Part 5.7 of the POEO Act, there is a duty to immediately notify (i.e. promptly and without delay) each relevant authority (see section 5.1.3) of a pollution incident where material harm to the environment is caused or threatened.

The POEO Act states that a pollution incident should be considered Material Harm if:

> *"(i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or*
>
> *(ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000"*

Material Harm only relates to pollution incidents. Other environmental incidents, such as conservation, heritage and planning breaches, are not included in the definition of a pollution incident.

5.1.2 Determining if an incident should be considered Material Harm

As soon as a person becomes aware of a pollution incident that has the potential to cause Material Harm, the Category 1 incident response should be followed (see Table 3.1a and Table 3.1b above). The determination on whether a pollution incident should be considered Material Harm should be made in accordance with Table 5.1.2.

Table 5.1.2: Determination of Material Harm pollution incidents

Project delivery	Material Harm determination
Activities undertaken by Regional Maintenance	The DES should make the determination (and any associated notifications) on whether a pollution incident should be considered Material Harm. If the DES is not available, the relevant Environment Manager should seek advice from other Roads and Maritime Environment Branch Directors, or make the material harm determination themselves. If no assistance can be obtained and it is suspected that a pollution incident should be considered Material Harm, the project should notify the relevant authorities in accordance with Table 5.1.3a or Table 5.1.3b (as relevant).
Activities undertaken by contractors	The contractor project team should make the determination (and any associated notifications) on whether a pollution incident should be considered Material Harm. The relevant Roads and Maritime Environment Manager or Environment Branch Director may contact the DES to assist in making an assessment of the incident, to aid the contractor in determining if the pollution incident should be considered Material Harm. Where Roads and Maritime believes a pollution incident should be considered Material Harm but the contractor disagrees, Roads and Maritime is required by law to notify EPA and other relevant authorities. In this instance the DES or DE would make a determination on whether the incident should be notified by Roads and Maritime as Material Harm. Roads and Maritime would provide details of any notifications made to the contractor.

Even if only limited information is available for a pollution incident being considered Material Harm, each relevant authority must be immediately notified with the information available and updates provided as soon as further relevant information becomes available.

In circumstances where there is doubt about the need to notify a pollution incident as Material Harm, Roads and Maritime and its contractors should always err on the side of notification.

When in doubt, communicate!

Note: Roads and Maritime is not responsible for notifying a Material Harm pollution incident caused by a traffic or vehicle accident where notification has already occurred by someone at the scene. However, if it is believed notification has not been undertaken, Roads and Maritime should undertake notification in accordance with section 5.1.3. Environment Branch can provide advice in this instance (see section 4.4).

5.1.3 Relevant authorities to notify

The relevant authorities that must be notified for a Material Harm pollution incident are listed in tables 5.1.3a and 5.1.3b below. It is important to note the order of notification and phone numbers to use can vary depending on the nature of the pollution incident, as detailed in the two tables.

All of the authorities listed (whether considered relevant or not) must be contacted for each Material Harm pollution incident to satisfy POEO Act requirements. Serious penalties apply to both individuals and corporations for failing to notify Material Harm pollution incidents:

- Maximum penalty for individuals - $500,000
- Maximum penalty for corporations - $2,000,000.

Table 5.1.3a: Authorities to notify for Material Harm pollution incidents that present an immediate threat to human health or property

Order	Authority	Contact Number
1	Fire and Rescue NSW	000
2	NSW EPA environment line	131 555
3	Ministry of Health (via the local Public Health Unit)*	Contact 1300 066 055 to be directed to the local Public Health Unit, or visit the NSW Health Website
4	SafeWork NSW	131 050
5	The Appropriate Regulatory Authority*, being either: • Local council • Western Lands Commissioner for the Western Division (except any part of the Western Division within the area of a local council).	Local council - contact Office of Local Government on 4428 4100, or visit the Office of Local Government website Western Lands Commissioner – phone 6883 5400

Table 5.1.3b: Authorities to notify for Material Harm pollution incidents that do NOT present an immediate threat to human health or property

Order	Authority	Contact Number
1	NSW EPA environment line	131 555
2	The Appropriate Regulatory Authority*, being either: • Local council • Western Lands Commissioner for the Western Division (except any part of the Western Division within the area of a local council).	Local council - contact Office of Local Government on 4428 4100, or visit the Office of Local Government website Western Lands Commissioner – phone 6883 5400

3	Ministry of Health (via the local Public Health Unit)*	Contact 1300 066 055 to be directed to the local Public Health Unit, or visit the NSW Health Website
4	SafeWork NSW	131 050
5	Fire and Rescue NSW	1300 729 579

* The appropriate contact for the Appropriate Regulatory Authority and Public Health Unit will vary according to the geographic location of the activity. These contact numbers should be found in advance and stored for immediate access (e.g. in a project's Construction Environmental Management Plan and/or on site notice boards) should a pollution incident need to be notified.

5.1.4 The relevant information to provide

It is important to avoid speculation on origin, causes or outcomes of a pollution incident in discussions with the authorities. Section 150 of the POEO Act provides the information that needs to be notified, being:

a) The time, date, nature, duration and location of the incident

b) The location of the place where pollution is occurring or is likely to occur, the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known

c) The circumstances in which the incident occurred (including the cause of the incident, if known)

d) The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known

e) Other information prescribed by the regulations.

Only known information should be provided when notifying of a Material Harm pollution incident. If further information becomes known after the initial notification, that information must immediately be notified to all authorities in accordance with Section 150 (see above). The immediate verbal notification is to be followed by written notification to each relevant authority within seven days of the date on which the incident occurred.

Complying with these notification requirements does not remove the need to comply with any other legislative requirements for incident notification (e.g. requirements under EPL conditions or the Work Health and Safety Act 2011).

5.2 Summary of other regulatory agency notification requirements

Specific statutory requirements relating to the notification of environmental incidents to relevant regulatory agencies are summarised in Table 5.2. Additional requirements adopted by Roads and Maritime are indicated in *italics*. Any notification to regulatory agencies should be indicated in the Environmental Incident Report Form to confirm that any required notifications have been initiated.

Table 5.2: Regulatory agency notification requirements

Legislation / issue	Regulating authority	Section / requirement
Commonwealth Aboriginal and Torres Strait Islanders Heritage Protection Act 1984	Department of the Environment and Energy	Section 20 – requirement to notify the Minister of the discovery of Aboriginal remains.
Contaminated Land Management Act 1997	EPA	Section 60 – requirement to notify if Roads and Maritime activities have contaminated land or if Roads and Maritime owns land that has been contaminated.
Heritage Act 1977	Office of Environment and Heritage	Section 146 – requirement to notify the Heritage Council of the location of the relic once a relic has been discovered or located.
National Parks and Wildlife Act 1974	Office of Environment and Heritage	Section 89A – requirement to notify the location of an Aboriginal object that is the property of the Crown.

Protection of the Environment Operations Act 1997	EPA and other relevant authorities	Section 148 – requirement to immediately notify pollution incidents that cause or threaten Material Harm to the environment (see Section 5.1)
	EPA	*Pro-active reporting to the local EPA officer of offsite pollution incidents that occur as a result of Roads and Maritime activities is encouraged as soon as practicable after the pollution incident occurs.*
Rural Fires Act 1997	NSW Rural Fire Service	Section 64 – requirement to notify an appropriate fire officer of the inability to extinguish any fire burning during a bush fire danger period applicable to the land.
Breach of Conditions of Approval (projects approved under Part 5.1 of the EP&A Act)	Department of Planning and Environment (DPE)	DPE should be notified by the project proponent when there has been a breach of a Condition of Approval (CoA). There may also be other notification requirements included in the CoA.
Water supply catchment areas	*Local water supply authority*	*If an environmental incident has the potential for unapproved impacts on a drinking water supply, the relevant water supply authority must be advised.*

5.3 Requests for written reports from regulatory authorities (activities delivered internally by Roads and Maritime)

Should Roads and Maritime directly receive a request from a regulatory authority for a written report regarding an environmental incident, Environment Branch and Legal Branch must be immediately contacted for advice. No further correspondence (including email) about the incident should be distributed either internally or externally until advice is received. Environment Branch will coordinate with Legal Branch to:

- Assist in the investigation of the incident
- Provide legal advice to the project
- Co-ordinate the preparation of the written response to the regulatory authority.

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November 2018
RMS 17.374
ISBN: 978-1-925659-57-3

Appendix 5 Newell Highway Upgrade Pollution Incident Management Site Flowchart

Newell Highway Upgrade Pollution Incident Management

Pollution incident occurs

Employee/Contractor/Supplier to immediately notify person responsible for managing the site:
Project Manager: Brooke Emmett — 0421 354 777
General Superintendent: Neil Ferguson — 0438 147 978
Superintendent Tyson Sheedy—0439 105 091
Environment Manager : Emma Wright — 0417 498 824
RMS Environment Manager: Jonathon Blizzard — 0476 836 490
(RMS to be contacted by Fulton Hogan PM or EM)

Is there an immediate threat to human health or property?

Yes → Contact Emergency Services on 000 → Immediately contact any person who may be in danger

No → Contact Environment Manager who will contact the Project Manager immediately to assist in making an assessment of the incident and to determine if the incident requires notification to the EPA Pollution Hot-line. PM or EM will report incident to RMS Project Manager Stuart Dearden and RMS Environment Manager Jonathon Blizzard

Is the incident likely to cause 'material harm to the

No → Are the incident control opportunities safe to implement?

Yes

Notify external contacts (if required):

1.	EPA Pollution Hotline (Only PM or EM to call this no)	131 555
2.	NSW Public Health Unit (Moree)	(02) 6757 0000
3.	SafeWork NSW (formerly WorkCover)	131 050
4.	Fire and Rescue NSW	000
5.	NSW Police (Boggabilla)	(07) 4671 9299
	or NSW Police (Moree)	(02) 6757 0799
6.	Moree Plains Shire Council (Boggabilla)	(07) 4676 2915
	or Moree Plains Shire Council (Moree)	(02) 6757 3222

→ Complete Authorities Notification Form (if SafeWork NSW involved)

Report fact only, do not report opinion

1. Time, date, nature, duration and location of the incident
2. Location of place where pollution is likely to occur
3. Nature, estimated quantity and concentration of any pollutants
4. Circumstances in which the incident occurred (cause)
5. Actions taken, or proposed to be taken, to deal with the incident and resulting pollution

Any information not known at the time of the initial notification must be included in the subsequent notification immediately after it becomes known.

→ If pollution complaint received, details must be recorded in register (EM)

Are the incident control opportunities safe to implement?

Implement controls to minimise impact → Monitor and assess the situation

Access appropriate clean up options

Undertake appropriate clean up options

Notify sensitive receivers if potentially affected

Place notification on website (if required)

Provide regular updates to authorities and neighbours

Undertake post incident investigation

Complete RMS Environmental Incident Form within 24 hours → If Pollution Hotline was called submit written re-port to EPA within 7 days → Review and update PIRMP within 30 days

Appendix 6 Emergency Spill Response Sub-Plan and Procedure

Purpose

This Sub-Plan and Procedure has been developed to meet the requirements of G36 Clause 4.3 and to describe measures to be undertaken to reduce the likelihood of fuel and chemical spills occurring on site and the procedures to be undertaken in the event that they do occur.

Induction and training

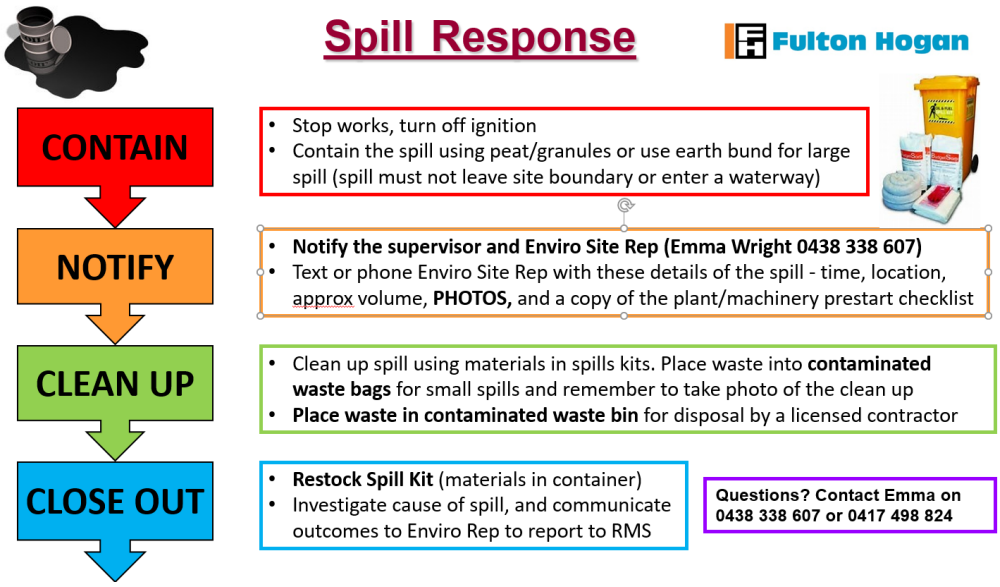
Site personnel and subcontractors will be inducted in the control measures to prevent fuel and chemical spills and the procedure to be undertaken if they do occur. During the Project induction, inductees are also informed that a daily plant prestart check must be undertaken for every work shift. Training will also occur on site via informal talks and as required in toolbox talks at prestart meetings.

Measures to avoid spillage of fuels, chemicals and liquids

The measures to be undertaken to avoid spillage of fuels, chemicals and liquids are detailed in the PIRMP - Appendix 2 - Risk Matrix and Risk Register.

Spill containment and clean up procedures

All spills must be contained and cleaned up as per the below spill response procedure. The procedure is to be printed and clearly visible at the site compounds and offices.



Locations of emergency wet and dry spill equipment

Spill kits are located in the main compound lay down area, and in the most active areas in the north and south work areas. As these locations change regularly, the current spill kit locations are marked up on the interactive site activity board at the main compound where the daily planning meetings are held. Mobile spill kits are also located in the Leading Hands work utes. Spill equipment is also stored in the emergency trailer which is taken to the site of all emergencies as per emergency response safety procedures.

Procedure for recording and notifying the Principal of all spills

The Project Environment Manager/Environment Site Representative (ESR) is responsible for recording and notifying the Principal of all spills on site. As soon as a spill has been reported to the ESR, the ESR immediately notifies RMS either in person, or by text, phone call or email. A written report (624 form, available on the RMS website) must be provided to RMS within 24 hours.

Procedure to minimise the possibility of pollution of the Site

The procedure to minimise the possibility of pollution of the Site was to undertake a risk register which details measures to be undertaken to reduce the likelihood of pollution occurring onsite and to reduce the impact of pollution should it occur. Refer to PIRMP - Appendix 2 - Risk Matrix and Risk Register. In addition to the risk register the following must also be undertaken:

- All fuels and chemicals are to be stored in self bunded containers at the main compound lay down area
- The main compound lay down area is to be bunded, with surface water flow being directed to the water storage basin
- The main compound lay down area's bunds are to be checked by the ESR during the weekly environment site inspections. Required maintenance actions to be raised to the Superintendent and promptly closed out
- In the event that chemical drums require disposal, the ESR is to be notified and will arrange for removal and transportation with a licensed waste transporter and recevial facility as appropriate for the type of chemical being disposed of
- Project requirement that all plant and machinery are inspected prior to the commencement of each work day and a daily plant prestart checklist is completed and submitted and kept on file by Fulton Hogan
- No wax or hydrocarbon curing compounds to be utilised prior to a storm event, or rainfall that may result in surface water run off from site. ESR to regularly email weather forecast to Superintendents, foremen and engineers to ensure compliance. In the event that there is a risk of chemical run off during a storm event, additional controls must be installed such as increasing the size of perimeter bunds to prevent chemical run off from site.